

Work Order ID 56674

Page 1

March 4, 2010 11:26:56 AM

Item ID: D412-742-043

Accept



Setup Start



Revision ID:

Stop



Item Name: Replacement Float Skidtube

Start Date: 3/04/10 Start Qty: 1.00



Cust Item ID:

Required Date: 3/12/10 Req'd Qty: 1.00



Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run HoursDraw
NumberDraw
Rev.Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

Draw Nbr

Revision Nbr

D3391

Rev H

100

0.00



DOCUMENT CONTROL

DC

0.00

Document Control

Memo

If D412-742-043 is a W/O on it's own,
Photocopy bluefile and create labels per PPP D412-742-043 CHG004

Work Order ID 56674



Page 2

March 4, 2010 11:26:57 AM

Item ID: D412-742-043

Accept



Setup Start



Revision ID:

Stop



Item Name: Replacement Float Skidtube

Start Date: 3/04/10 Start Qty: 1.00



Cust Item ID:

Required Date: 3/12/10 Req'd Qty: 1.00



Customer:

Reference:

Run Start



Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Stop



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Draw
Number

Draw
Rev.

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

110

0.00



HandFinishing

HandFinish

Memo

0.00

Hand Finishing

1-Install tubes together and seal them all the way around using Sikaflex 241/291. Ensure tube ends line-up with saddle holes for proper alignment. using 7/16" "T" Pins.

A/R ☐ Sikaflex-241/-291 ☐

M112429

Expiry date: ☐ 10/08

2-Install wearplates as per Dwg D3391. Ensure that plastic washers are against wearplate, then topped with the SS washer. Seal all bolts with sikaflex except ones with inserts on inside of tube ,hand tighten only bolts with no sikaflex.

A/R ☐ Sikaflex-241/-291 ☐

M112429

Expiry date: ☐ 10/08

3-Remove "T" pins once sikaflex is dry.

4-Coat all exposed hardware with LPS Procyon. Remove any excess off with MEK degreaser.

A/R ☐ LPS Procyon ☐

M104251

M-h 10/04/29

Work Order ID 56674

March 4, 2010 11:27:24 AM



Page 3

Item ID: D412-742-043

Accept



Setup Start



Revision ID:

Stop



Item Name: Replacement Float Skidtube

Start Date: 3/04/10

Start Qty: 1.00



Cust Item ID:

Required Date: 3/12/10

Req'd Qty: 1.00



Customer:

Reference:

Run Start



Approvals:

Process Plan:

Date:

Tooling:

Date:

Stop



QC:

Date:

SPC (Y/N):

Date:

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run HoursDraw
NumberDraw
Rev.Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

120

QC5- Inspect part completeness to step on W/O

0.00



QC

Memo

0.00

8/10/10/12



Quality Control.

130

Packaging

0.00



Packaging

Memo

0.00

APD 56674

10-5-3

sf

Packaging

Identify and pack for shipping as per PPP D412-742-043

Location:

PPP Rev: 0

140

QC21- Final Inspection - Work Order Release

0.00



QC

Memo

0.00

10/05/04

Quality Control

W/O 15.01

Picklist Print

March 4, 2010 11:24:02 AM

Page 8

Work Order ID: 56674

Parent Item: D412-742-043

Parent Item Name: Replacement Float Skidtube

Comments: IPP Rev A 05.10.13 New Issue
IPP Rev B 06.02.13 ECN 773 dwg @ rev.D
IPP Rev: C 07-05-28 As per Rev F
IPP Rev: D 07-12-04 ECN 1072

KJ/JLM
EC
JLM
DD verified by: JLM

Start Date: 3/04/10

Start Qty: 1.00

Required Date: 3/12/10

Required Qty: 1.00

AN3C4A Purchased No 110 Each 1,333.000 24.0000



BOLT

Warehouse	Loc Qty	Loc Code
<u>Location</u>		
Main Warehouse	M114330	
ST	1333	
112314	13	
112720	12	
112724	3	
112829	1	
112991	2	
113121	64	
113226	344	
113644	294	
113749	100	
114103	500	

24 x m-k
10/04/29

AN3C6A Purchased No 110 Each 730.0000 12.0000



BOLT

Warehouse	Loc Qty	Loc Code
<u>Location</u>		
Main Warehouse		
ST	730	
111982 ✓	730	

12 x m-k
10/04/29

March 4, 2010 11:24:02 AM

Shop Packet Print

Page 9

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

March 4, 2010 11:24:02 AM

Page 16

Work Order ID: 56674

Parent Item: D412-742-043

Parent Item Name: Replacement Float Skidtube

Comments: IPP Rev A 05.10.13 New Issue
IPP Rev B 06.02.13 ECN 773 dwg @ rev.D
IPP Rev: C 07-05-28 As per Rev F
IPP Rev: D 07-12-04 ECN 1072

KJ/JLM
EC
JLM
DD verified by: JLM

Start Date: 3/04/10

Required Date: 3/12/10

Start Qty: 1.00

Required Qty: 1.00

AN3C7A Purchased No 110 Each 493.0000 8.0000



BOLT

Warehouse Loc Qty Loc Code

Location

Main Warehouse

ST

493

105906

21

107376

252

113149 ✓

220

AN960C10L Purchased No 110 Each 388.0000 44.0000



washer

Warehouse Loc Qty Loc Code

Location

OFFSHORE

FG

100

103585

100

Main Warehouse

ST

288

112116

128

112612

160

D3391-021 Manufactured No 110 Each 0.0000 1.0000



Fwd Tube Assembly

B 56216

44x m-h
10/04/29
1x m-h
10/04/29

March 4, 2010 11:24:02 AM

Shop Packet Print

Page 10

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

March 4, 2010 11:24:08 AM

Page 13

Work Order ID: 56674

Parent Item: D412-742-043

Parent Item Name: Replacement Float Skidtube

Comments:

IPP Rev A ☐ 05.10.13 ☐ New Issue ☐
 IPP Rev B ☐ 06.02.13 ☐ ECN 773 dwg @ rev.D
 IPP Rev: C 07-05-28 As per Rev F
 IPP Rev: D 07-12-04 ECN 1072

KJ/JLM ☐
 EC
 JLM
 DD verified by: JLM

Start Date: 3/04/10

Start Qty: 1.00

Required Date: 3/12/10

Required Qty: 1.00

D3391-023 Manufactured No

110 Each 2.0000 1.0000



Mid Tube Assembly

Warehouse	Loc Qty	Loc Code
<u>Location</u>		
Main Warehouse	B 56492	
ST	2	
40522	1	
53938	1	

1x m-l
 10/04/28

D3391-025 Manufactured No

110 Each 3.0000 1.0000



Aft Tube Assembly

Warehouse	Loc Qty	Loc Code
<u>Location</u>		
Main Warehouse	B 56218	
ST	3	
39129	1	
48122	1	
54703	1	

1x m-l
 10/04/28

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

March 4, 2010 11:24:08 AM

Page 4

Work Order ID: 56674



Parent Item: D412-742-043



Parent Item Name: Replacement Float Skidtube

Start Date: 3/04/10

Required Date: 3/12/10

Comments: IPP Rev A 05.10.13 New Issue
IPP Rev B 06.02.13 ECN 773 dwg @ rev.D
IPP Rev: C 07-05-28 As per Rev F
IPP Rev: D 07-12-04 ECN 1072

KJ/JLM
EC
JLM
DD verified by: JLM

Start Qty: 1.00

Required Qty: 1.00

D3564-1

Manufactured No

110

Each

19.0000

1.0000



Wearshoe

Warehouse
Location

Loc Qty

Loc Code

OFFSHORE

FG

2

33798

2

Main Warehouse

ST

17

47531

1

50270

1

51676 ✓

15

1x m-h
w/04/29

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

Page 5

March 4, 2010 11:24:13 AM

Work Order ID: 56674



Parent Item: D412-742-043



Parent Item Name: Replacement Float Skidtube

Start Date: 3/04/10

Required Date: 3/12/10

Comments: IPP Rev A 05.10.13 New Issue
IPP Rev B 06.02.13 ECN 773 dwg @ rev.D
IPP Rev:C 07-05-28 As per Rev F
IPP Rev:D 07-12-04 ECN 1072

KJ/JLM
EC
JLM
DD verified by:JLM

Start Qty: 1.00

Required Qty: 1.00

D3564-3

Manufactured No

110

Each

20.0000

1.0000



Wearshoe

Warehouse

Loc Qty

Loc Code

Location

OFFSHORE

FG

2

33764

2

Main Warehouse

FP

6

50113 ✓

6

Main Warehouse

FP19

11

55489

11

Main Warehouse

ST

1

46445

1

1x m-h 10/04/29

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

March 4, 2010 11:24:14 AM

Page 6

Work Order ID: 56674



Parent Item: D412-742-043



Parent Item Name: Replacement Float Skidtube

Start Date: 3/04/10

Required Date: 3/12/10

Comments: IPP Rev A 05.10.13 New Issue
IPP Rev B 06.02.13 ECN 773 dwg @ rev.D
IPP Rev: C 07-05-28 As per Rev F
IPP Rev: D 07-12-04 ECN 1072

KJ/JLM
EC
JLM
DD verified by: JLM

Start Qty: 1.00

Required Qty: 1.00

D3564-5

Manufactured No

110

Each

37.0000

1.0000



Wearshoe

Warehouse

Loc Qty

Loc Code

Location

OFFSHORE

FG

34806

Main Warehouse

FP19

51925

54772

55024

55333

Main Warehouse

ST

45824

47433

BS7525

2

2

33

1

7

12

13

2

1

1

1X m-k
10/04/29

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

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Page 7

Work Order ID: 56674



Parent Item: D412-742-043



Parent Item Name: Replacement Float Skidtube

Start Date: 3/04/10

Required Date: 3/12/10

Comments: IPP Rev A 05.10.13 New Issue
IPP Rev B 06.02.13 ECN 773 dwg @ rev.D
IPP Rev:C 07-05-28 As per Rev F
IPP Rev:D 07-12-04 ECN 1072

KJ/JLM
EC
JLM
DD verified by:JLM

Start Qty: 1.00

Required Qty: 1.00

D3566-1 Manufactured No

110

Each

25.0000

2.0000



Gasket

Warehouse

Loc Qty

Loc Code

Location

BS7257

Main Warehouse

FP

20

52512

3

54480

1

55011

1

55320

15

Main Warehouse

ST

5

46349

1

51218

1

51259

3

2x m-l
10/04/29

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

March 4, 2010 11:24:19 AM

Page 8

Work Order ID: 56674



Parent Item: D412-742-043



Parent Item Name: Replacement Float Skidtube

Start Date: 3/04/10

Required Date: 3/12/10

Comments: IPP Rev A 05.10.13 New Issue
IPP Rev B 06.02.13 ECN 773 dwg @ rev.D
IPP Rev: C 07-05-28 As per Rev F
IPP Rev: D 07-12-04 ECN 1072

KJ/JLM
EC
JLM
DD verified by: JLM

Start Qty: 1.00

Required Qty: 1.00

D3566-5

Manufactured No

110

Each

27.0000

1.0000



Gasket



Warehouse

Loc Qty

Loc Code

Location

Main Warehouse

FP19

23

55026

11

55335

12

Main Warehouse

ST

4

36113

1

46186

1

47318

1

51260

1

B57526

1X m.k.
w/04/29

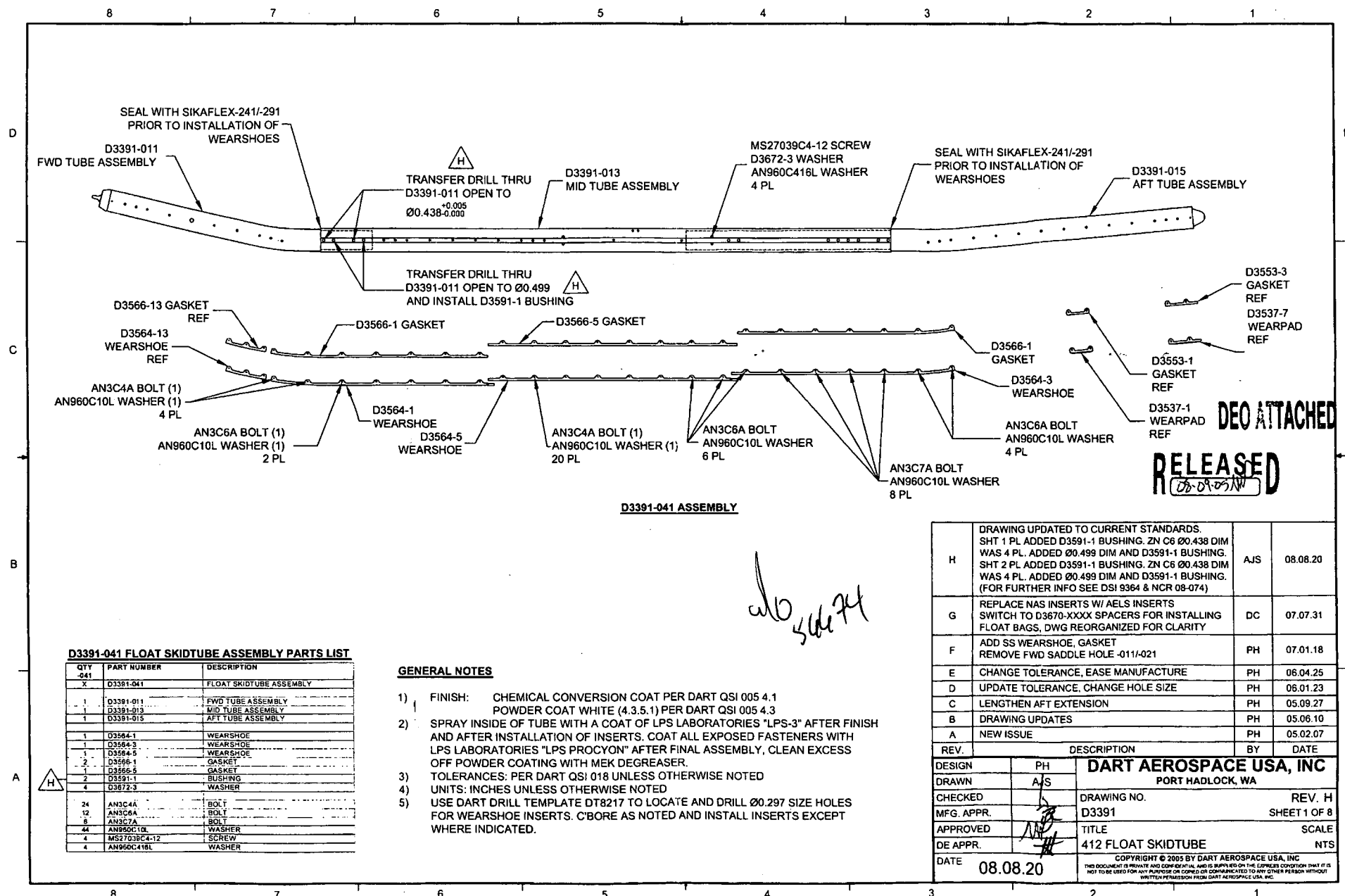
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



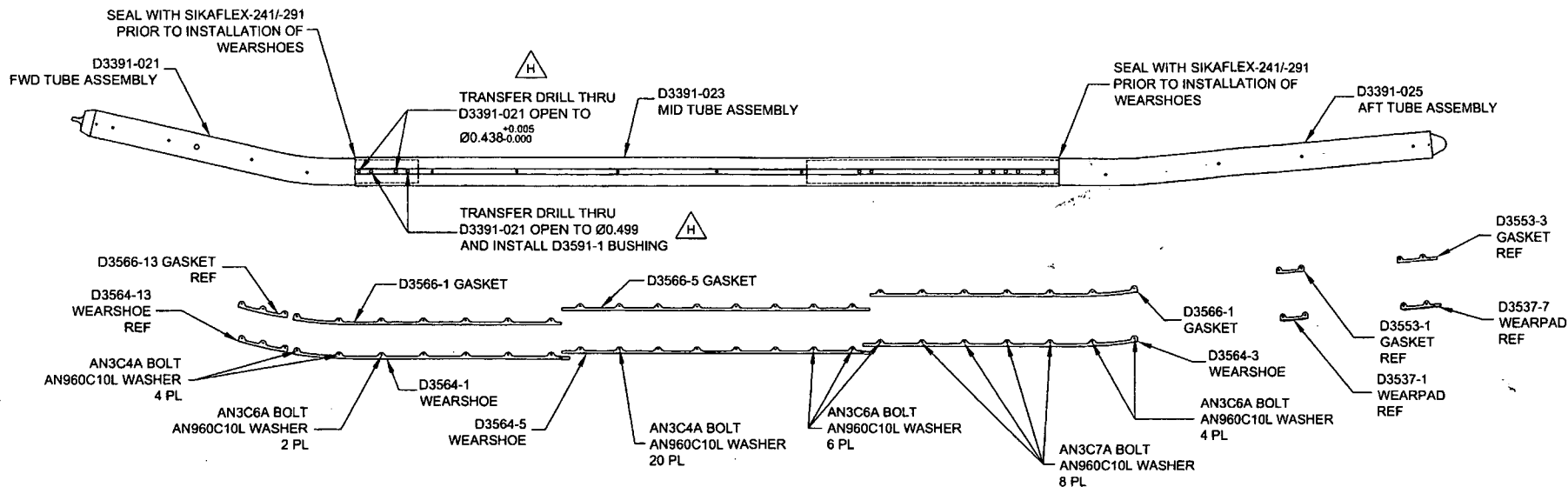
D3391-041 FLOAT SKIDTUBE ASSEMBLY PARTS LIST

QTY	PART NUMBER	DESCRIPTION
1	D3391-041	FLOAT SKIDTUBE ASSEMBLY
1	D3391-011	FWD TUBE ASSEMBLY
1	D3391-013	MID TUBE ASSEMBLY
1	D3391-015	AFT TUBE ASSEMBLY
1	D3564-1	WEARSHOE
1	D3564-3	WEARSHOE
1	D3564-5	WEARSHOE
2	D3591-1	BUSHING
1	D3566-1	GASKET
1	D3566-5	GASKET
4	D3672-3	WASHER
24	AN3C4A	BOLT
12	AN3C6A	BOLT
8	AN3C7A	BOLT
44	AN960C10L	WASHER
4	MS27039C4-12	SCREW
4	AN960C416L	WASHER

GENERAL NOTES

- 1) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
POWDER COAT WHITE (4.3.5.1) PER DART QSI 005 4.3
- 2) SPRAY INSIDE OF TUBE WITH A COAT OF LPS LABORATORIES "LPS-3" AFTER FINISH
AND AFTER INSTALLATION OF INSERTS. COAT ALL EXPOSED FASTENERS WITH
LPS LABORATORIES "LPS PROCYON" AFTER FINAL ASSEMBLY, CLEAN EXCESS
OFF POWDER COATING WITH MEK DEGREASER.
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) USE DART DRILL TEMPLATE DT8217 TO LOCATE AND DRILL Ø0.297 SIZE HOLES
FOR WEARSHOE INSERTS. C'BORE AS NOTED AND INSTALL INSERTS EXCEPT
WHERE INDICATED.

H	DRAWING UPDATED TO CURRENT STANDARDS. SHT 1 PL ADDED D3591-1 BUSHING. ZN C6 Ø0.438 DIM WAS 4 PL. ADDED Ø0.499 DIM AND D3591-1 BUSHING. SHT 2 PL ADDED D3591-1 BUSHING. ZN C6 Ø0.438 DIM WAS 4 PL. ADDED Ø0.499 DIM AND D3591-1 BUSHING. (FOR FURTHER INFO SEE DSI 9364 & NCR 08-074)	AJS	08.08.20
G	REPLACE NAS INSERTS W/ AELS INSERTS SWITCH TO D3670-XXXX SPACERS FOR INSTALLING FLOAT BAGS, DWG REORGANIZED FOR CLARITY	DC	07.07.31
F	ADD SS WEARSHOE, GASKET REMOVE FWD SADDLE HOLE -011/-021	PH	07.01.18
E	CHANGE TOLERANCE, EASE MANUFACTURE	PH	06.04.25
D	UPDATE TOLERANCE, CHANGE HOLE SIZE	PH	06.01.23
C	LENGTHEN AFT EXTENSION	PH	05.09.27
B	DRAWING UPDATES	PH	05.06.10
A	NEW ISSUE	PH	05.02.07
REV.	DESCRIPTION	BY	DATE
DESIGN	PH		
DRAWN	AJS		
CHECKED			
MFG. APPR.			
APPROVED			
DE APPR.			
DATE	08.08.20		
DART AEROSPACE USA, INC PORT HADLOCK, WA			
DRAWING NO. D3391		REV. H SHEET 1 OF 8	
TITLE 412 FLOAT SKIDTUBE		SCALE NTS	
COPYRIGHT © 2005 BY DART AEROSPACE USA, INC THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.			



D3391-043 ASSEMBLY

D3391-043 FLOAT SKIDTUBE ASSEMBLY PARTS LIST

QTY	PART NUMBER	DESCRIPTION
X	D3391-043	FLOAT SKIDTUBE ASSEMBLY
1	D3391-021	FWD TUBE ASSEMBLY
1	D3391-023	MID TUBE ASSEMBLY
1	D3391-025	AFT TUBE ASSEMBLY
1	D3564-1	WEARSHOE
1	D3564-3	WEARSHOE
1	D3564-5	WEARSHOE
2	D3566-1	GASKET
1	D3566-5	GASKET
2	D3591-1	BUSHING
24	AN3C4A	BOLT
12	AN3C6A	BOLT
9	AN3C7A	BOLT
44	AN960C10L	WASHER

GENERAL NOTES

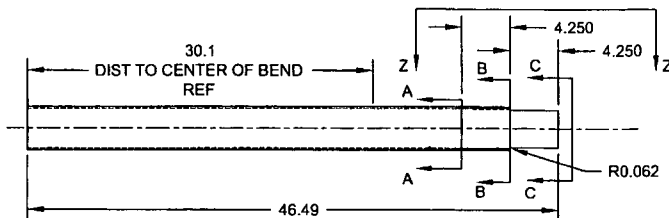
- 1) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
POWDER COAT WHITE (4.3.5.1) PER DART QSI 005 4.3
- 2) SPRAY INSIDE OF TUBE WITH A COAT OF LPS LABORATORIES "LPS-3" AFTER FINISH AND AFTER INSTALLATION OF INSERTS. COAT ALL EXPOSED FASTENERS WITH LPS LABORATORIES "LPS PROCYON" AFTER FINAL ASSEMBLY, CLEAN EXCESS OFF POWDER COATING WITH MEK DEGREASER.
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) USE DART DRILL TEMPLATE DT8217 TO LOCATE AND DRILL Ø0.297 SIZE HOLES FOR WEARSHOE INSERTS. C'BORE AS NOTED AND INSTALL INSERTS EXCEPT WHERE INDICATED.

DESIGN	PH	DART AEROSPACE USA, INC	
DRAWN	AJS	PORT HADLOCK, WA	
CHECKED		DRAWING NO.	REV. H
MFG. APPR.		D3391	SHEET 2 OF 8
APPROVED		TITLE	SCALE
DE APPR.		412 FLOAT SKIDTUBE	NTS
DATE	08.08.20	<small>COPYRIGHT © 2005 BY DART AEROSPACE USA, INC THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.</small>	

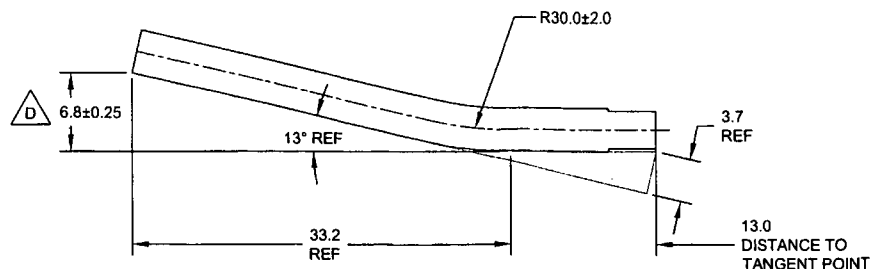
DEO ATTACHED

RELEASED
08-09-25-10

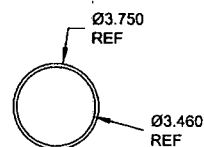
WLB 56674



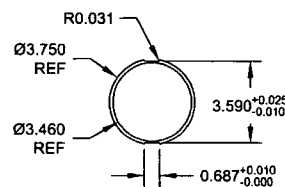
D3391-1 CUTTING DETAIL
(MAKE FROM D6013-047 SKIDTUBE MATERIAL)



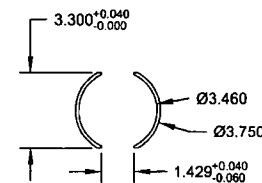
D3391-011/-021 BENDING DETAIL
(MAKE FROM D3391-1)



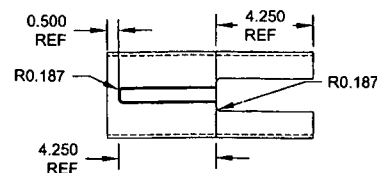
SECTION A-A
SCALE 2X



SECTION B-B
SCALE 2X



SECTION C-C
SCALE 2X

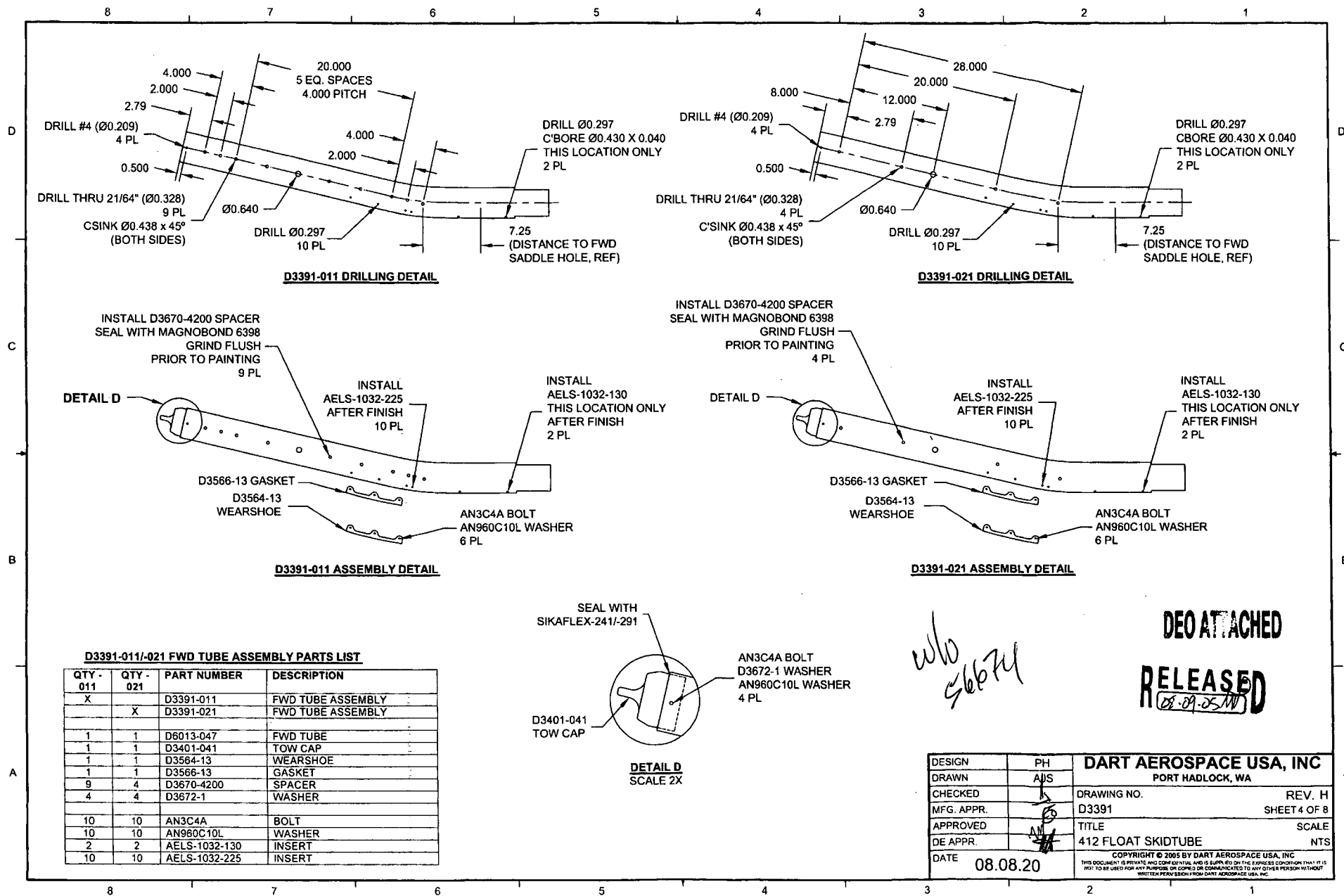


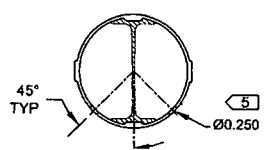
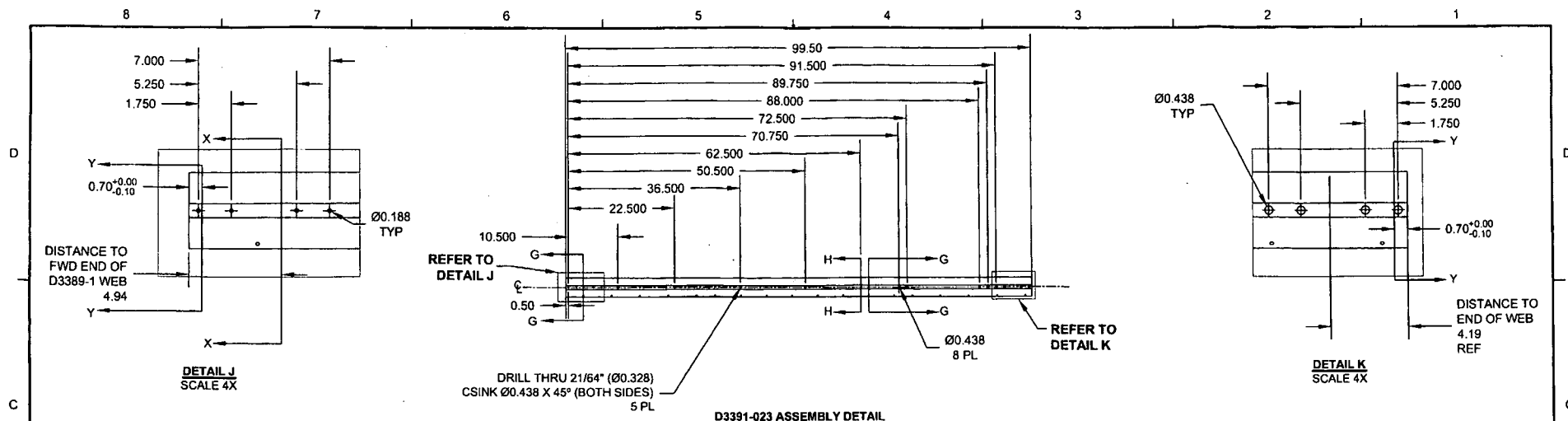
VIEW Z-Z
SCALE 2X

WLB 56674

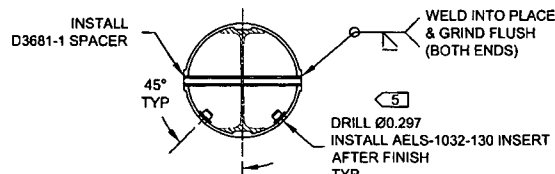
DESIGN	PH	DART AEROSPACE USA, INC	
DRAWN	AUS	PORT HADLOCK, WA	
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MFG. APPR.		D3391	SHEET 3 OF 8
APPROVED		TITLE	SCALE
DE APPR.		412 FLOAT SKIDTUBE	NTS
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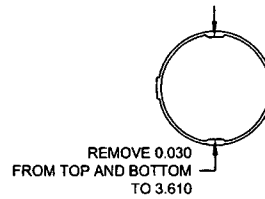




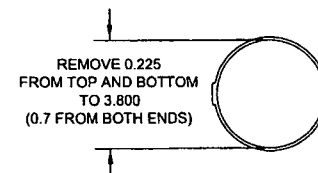
SECTION G-G
SCALE 5X



SECTION H-H
SCALE 5X



SECTION X-X
SCALE 5X



SECTION Y-Y
SCALE 5X

D3391-023 MID TUBE ASSEMBLY PARTS LIST

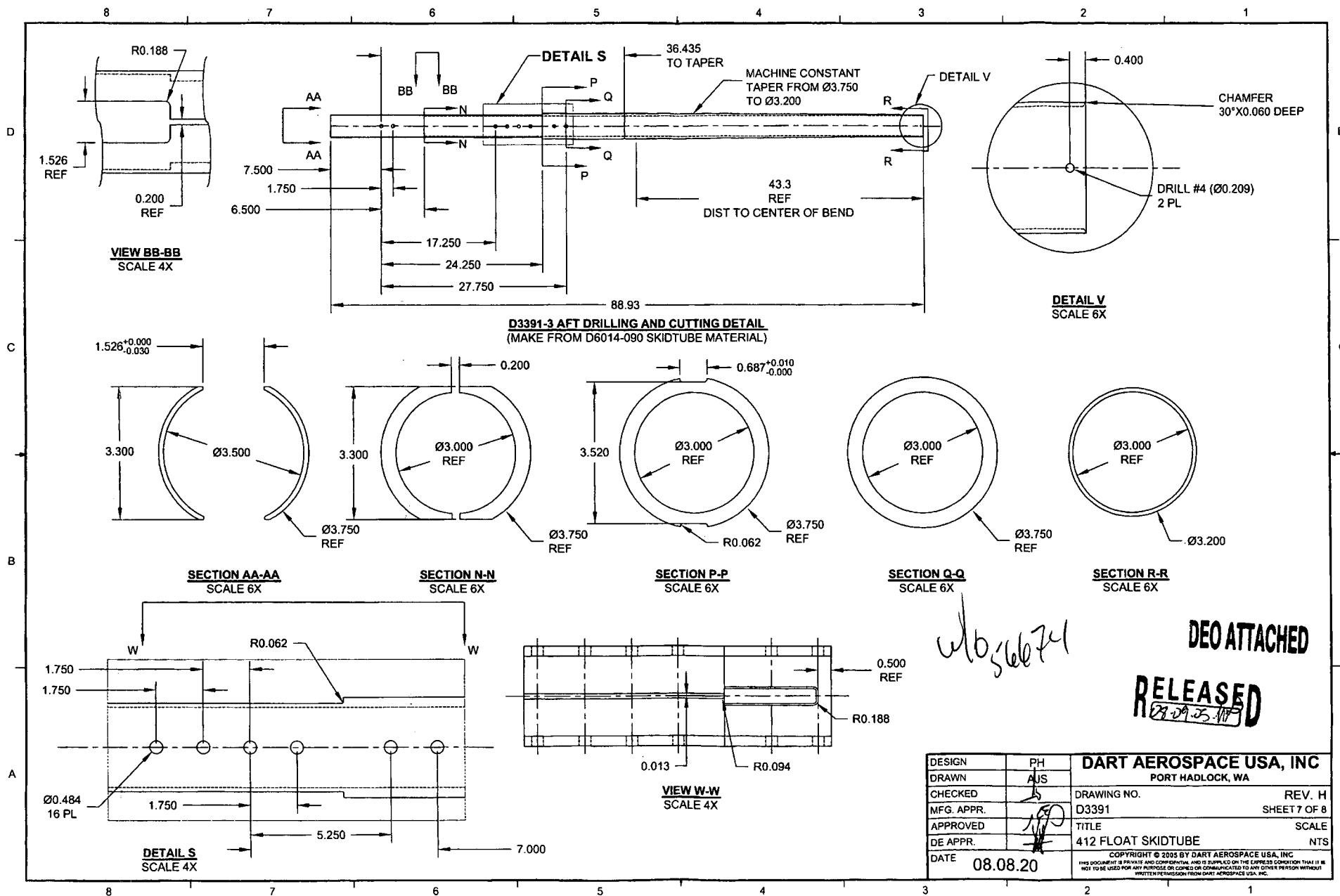
QTY - 023	PART NUMBER	DESCRIPTION
X	D3391-023	MID TUBE ASSEMBLY
1	D2500-1-100	EXTRUSION
1	D3389-1	WEB
5	D3681-1	SPACER
20	AELS-1032-130	INSERT

D3391-023 MID TUBE ASSEMBLY

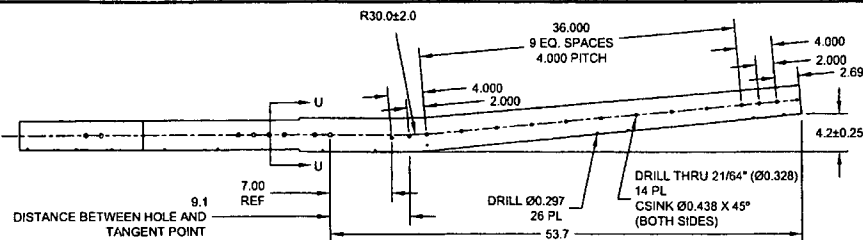
- 1) MATERIAL: MAKE FROM D2500-1-100 EXTRUSION
- 2) INSTALL D3389-1 WEB TO OUTER TUBE USING SIKAFLEX-241/291 PER QSI 015
- 3) WELDING: PER DART QSI 004

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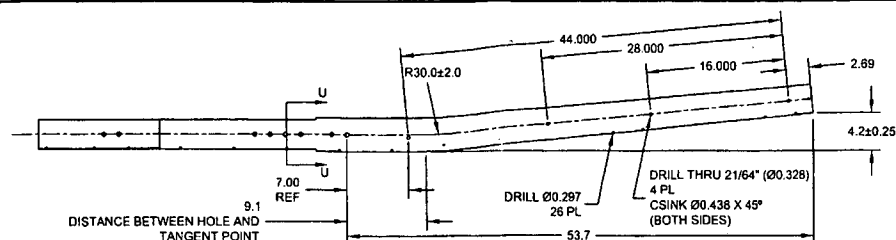
DEO ATTACHED
RELEASED
08-09-05-W



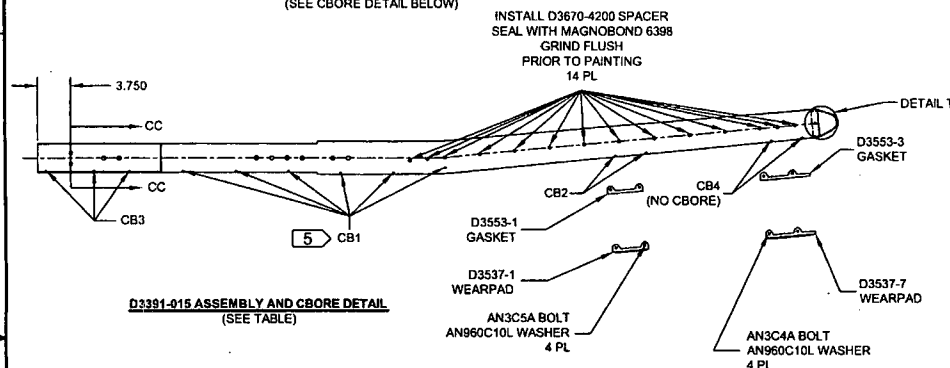
DEO ATTACHED
RELEASED
27.09.25.117



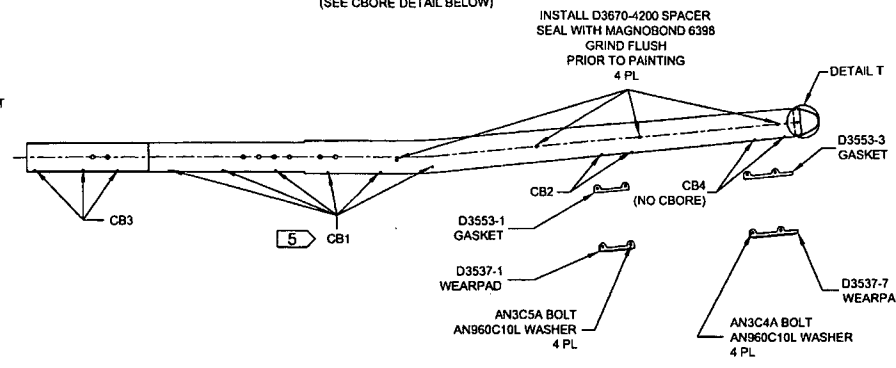
D3391-015 BENDING AND DRILLING DETAIL
(SEE CBORE DETAIL BELOW)



D3391-025 BENDING AND DRILLING DETAIL
(SEE CBORE DETAIL BELOW)



D3391-015 ASSEMBLY AND CBORE DETAIL
(SEE TABLE)

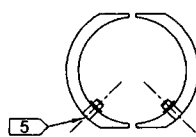


D3391-025 ASSEMBLY AND CBORE DETAIL
(SEE TABLE)

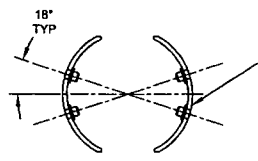
QTY - 015	QTY - 025	PART NUMBER	DESCRIPTION
X		D3391-015	AFT TUBE ASSEMBLY
	X	D3391-025	AFT TUBE ASSEMBLY
1	1	D6014-090	AFT TUBE
1	1	D2646	AFT CAP
1	1	D3537-1	WEARPAD
1	1	D3537-7	WEARPAD
1	1	D3553-1	GASKET
1	1	D3553-3	GASKET
14	4	D3670-4200	SPACER
2	2	D3672-1	WASHER
14	14	AELS-1032-130	INSERT
12	12	AELS-1032-225	INSERT
4		ALS-428-165	INSERT
6	6	AN3C4A	BOLT
4	4	AN3C5A	BOLT
10	10	AN960C10L	WASHER

CBORE HOLES MARKED CB1-CB4 AS FOLLOWS AND
INSTALL AELS-1032-XXX AFTER FINISH AS NOTED

HOLES MARKED	QTY D3391-015	QTY D3391-025	CBORE	PIN
CB1	12	12	Ø0.430 X 0.170	AELS-1032-225
CB2	4	4	Ø0.430 X 0.170	AELS-1032-130
CB3	6	6	Ø0.430 X 0.040	AELS-1032-130
CB4	4	4	NONE	AELS-1032-130

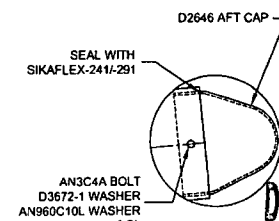


SECTION U-U
SCALE 3X



SECTION CC-CC
SCALE 3X

DRILL Ø0.391
CBORE Ø0.516 X 0.040 DEEP
INSTALL ALS-428-165 INSERT
4 PL



DETAIL T
SCALE 4X

DEO ATTACHED

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08-09-05/10

DESIGN	PH	DART AEROSPACE USA, INC	
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DRAWING NO. D3391	TITLE 412 FLOAT SKIDTUBE	REV. H	DART AEROSPACE USA, INC ENGINEERING ORDER		D.E.O. NO. D3391-H-1	SHEET NO. SHEET 1 OF 1	SCALE NTS
DRAWN <i>WP</i>	CHECKED <i>h</i>	MFG. APPR. <i>AA</i>	APPROVED <i>WP</i>	DE APPR. <i>h</i>			
DATE 09.09.23	DATE 06.09.24	DATE 09/09/25	DATE 09/09/30	DATE 09/09/30			

PURPOSE:

LPS-3 IS NO LONGER USED DURING ASSEMBLY OF D3391-041/-043 SKIDTUBES.

CHANGE:

AMEND NOTE 2 OF D3391-041/-043 SKIDTUBE ASSEMBLIES (ZN A6-1, A6-2) AS FOLLOWS:

- 2) ~~SPRAY INSIDE OF TUBE WITH A COAT OF LPS LABORATORIES "LPS-3" AFTER FINISH~~
~~AND AFTER INSTALLATION OF INSERTS. COAT ALL EXPOSED FASTENERS WITH~~
 LPS LABORATORIES "LPS PROCYON" AFTER FINAL ASSEMBLY, CLEAN EXCESS
 OFF POWDER COATING WITH MEK DEGREASER.

RELEASED
 2010-02-02

WP

WP
 50674